Editorial

Craniofacial reconstruction and stem cell engineering

The birth of 21st century heralded many advances in the craniofacial reconstruction arena. Many basic works, that was initiated in the mid of 20th century started to get translated to clinical works. This witnessed birth of newer, rapid methods of craniofacial reconstruction. At the same time, even facial transplants became a reality. Such was the rapid advancement of science.

With the emergence of adipocyte and osteosynthesis technique,[1] more opportunities began to emerge. These cells which have been dreaded by the young adults, partly in the form of cellulite, began to emerge as a wholesome, simple treatment option. Several pioneers began using this option to reconstruct craniofacial bones[2,3] successfully. With these huge success stories, the hunt for bringing this technology has already begun. As the cells can be successfully harvested from self, there is no risk of allergic or immunologic reaction. Besides the stem cells being a part of the host, an inflammatory reaction would be lowest. In addition, there are few or no risks of adverse reactions. The long-term effect of such regenerative procedures is still not known. However considering the huge benefits coming out of this technique, expansion of the adipocyte stem cell for craniofacial reconstruction is need of the hour. Though, the initial expense for installing the infrastructure is high, the long-term savings in terms of man hours, additional materials, drugs, etc., would be extremely beneficial. Furthermore, when translated to bedside procedure in several centers, the cost of the infrastructure and consumables would further drop. Hope the technique would rapidly be incorporated into regular clinical oral and maxillofacial surgery practice.

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